



Managing Wildlife Hazards at Tropical Pacific Airports

Daniel Vice

***United States Department
of Agriculture,
Animal and Plant Health
Inspection Service,
Wildlife Services***



Presentation outline

- Overview of wildlife and aviation
- Micronesian wildlife issues
- Legal requirements (Assessment)
- Management actions

**USDA, Wildlife Services provides
federal expertise in managing
human/wildlife conflicts through direct
control, technical assistance, and
research and development**

**MOU between FAA and USDA
establishes a cooperative
relationship for resolving wildlife
hazards to civil aviation to benefit
human safety**

COMMON RESPONSES TO WILDLIFE ON AIRPORTS

- “We don’t have a bird problem”
- “They just get out of our way”
- “We fly right through them”
- “Even if we do hit a few, they don’t do any damage”
- “Birds can’t bring down a jet!”

The first step is admitting you have a problem!



**MOST
WILDLIFE
STRIKES DO
NOT RESULT
IN AIRCRAFT
DAMAGE,
BUT...**





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Wildlife strikes cost U.S. civil aviation over \$100 million annually

Reasons for concern

- Increasing flight volume in relatively remote locations
- Faster aircraft with fewer engines
- Generally increasing wildlife abundance
- Dynamic seasonal and geographic variation in wildlife populations



A quick physics lesson...

**Force
equals
mass times acceleration
($F = M \times A$)**

Think of birds as “feathered FOD”

**FAILING TO ADDRESS
WILDLIFE IN THE
AIRPORT ENVIRONMENT
PLACES THE
RESPONSIBILITY OF
AVIATION SAFETY IN THE
“HANDS” OF ANIMALS...**

Wildlife threats to aviation safety in Micronesia vary seasonally and locally



Shorebirds



Dogs, etc.



Wading birds



Sea birds





The Federal Aviation Administration (FAA) requires all airfields handling commercial aircraft with 9 or more passenger seats to address wildlife hazards if a real or potential wildlife problem is present (Title 14, Code of Federal Regulations, Part 139).

Compliance with FAR Part 139.337 requires certificated airports to conduct a Wildlife Hazard Assessment (WHA) when any of the following events occur on or near an airport:

- 1) An air carrier aircraft experiences multiple wildlife strikes;**
- 2) An air carrier aircraft experiences a damaging collision with wildlife,**
- 3) An air carrier aircraft experiences an engine ingestion of wildlife, or;**
- 4) Wildlife of a size or in numbers capable of causing an event described above is known to have access to any flight pattern or movement area.**

Wildlife Hazard Assessment

- Assess species abundance, diversity, frequency of use over a 12-month period
- Assess wildlife attractants on and around airfield
- Develop recommendations to manage wildlife based upon the assessment



BASIC WILDLIFE HABITAT NEEDS...

- Food
- Cover
- Water
- Shelter









Most Micronesian airports have relatively simple wildlife problems

- **Small land masses**
- **Distant from continental land masses**
- **Limited species diversity**
- **Do not have large migratory waterfowl or gulls**

However, every airport is different and management must be specific to each individual environment!

**Upon completion of the WHA,
the FAA may require the
development of a Wildlife
Hazard Management Plan
(WHMP); developing the plan is
the responsibility of the airport
manager under FAR Part
139.337.**

Successful Management Requires Integrated Wildlife Damage Management

- **Target efforts on all species that cause risk – Think risk management!**
- **Utilize control methods that are effective on each species**
 - **Harassment**
 - **Habitat management**
 - **Lethal control**
 - **Catch and relocate**
- **Do not allow complacency or inaction**



Management actions that control one species often benefit others

- Mowing and impacts on egrets and plovers



Legal Requirements for U.S. Airports

- **Endangered Species Act (ESA)**
- **Migratory Bird Treaty Act (MBTA)**
- **Local, State, and Territorial Laws**

Use of federal dollars may require compliance with federal law

REVIEW OF ACTIONS

- **Assessment to identify risks**
 - **Species abundance and use**
 - **Habitat features that serve as attractants**
- **Develop management plan specific to airport**
- **Develop management actions specific to each targeted species**
- **Implement with vigilance**
- **Monitor for results and changing risks**
- **Do not dismiss wildlife presence as no risk**

Contacts for Assistance

FAA Airports District Office, Honolulu

Mack Humphrey, Airport Certification Safety Inspector

808.541.1243

mack.humphery@faa.gov

USDA Wildlife Services, Guam

Daniel Vice 671.635.4400

daniel.s.vice@aphis.usda.gov

USDA Wildlife Services, Hawaii

Mike Pitzler 808.861.8576

mike.e.pitzler@aphis.usda.gov

**THANK YOU FOR YOUR
ATTENTION**

QUESTIONS?